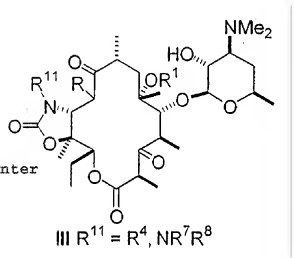
IN THE CLAIMS

1-5. (Cancelled)

6. (Currently Amended) A 10-desmethyl macrolide consisting of ~~comprising~~ formula III:




O.K. to enter
E.P.

III $R^{11} = R^4, NR^7R^8$

(1) R is methyl substituted with one or more substituents selected from the group consisting of

(i) CN,

(ii) F,

(iii)$CO_2R^3$ wherein $R^3$ is selected from hydrogen, $C_1$-$C_3$-alkyl or aryl substituted $C_1$-$C_3$-alkyl, or heteroaryl substituted $C_1$-$C_3$-alkyl,

(iv) $OR^4$ wherein $R^4$ is selected from hydrogen, $C_1$-$C_4$-alkyl or aryl substituted $C_1$-$C_4$-alkyl, or heteroaryl substituted $C_1$-$C_4$-alkyl, heterocycloalkyl and optionally substituted cycloalkyl, $C_1$-$C_3$-alkoxy-$C_1$-$C_3$-alkoxy, $C_2$-$C_4$-alkenyl or aryl substituted $C_2$-$C_4$-alkenyl, or heteroaryl substituted $C_2$-$C_4$-alkenyl, heterocycloalkyl and optionally substituted cycloalkyl, aryl or optionally substituted aryl, heteroaryl or optionally substituted heteroaryl,

(v) $S(O)_nR^3$ wherein n =0, 1 or 2 and $R^3$ is as previously defined

(vi) $NR^4C(O)R^3$ wherein $R^3$ and $R^4$ are as previously defined

(vii)$NR^4C(O)NR^5R^6$ wherein $R^4$ is defined as defined previously, and $R^5$ and $R^6$ are independently selected from hydrogen, $C_1$-$C_3$-alkyl, $C_1$-$C_3$ alkyl substituted with aryl, substituted aryl, heteroaryl, substituted heteroaryl

(viii) $NR^7R^8$ wherein $R^7$ and $R^8$ are independently selected from the group consisting of

(a) hydrogen

(b) $C_1$-$C_{12}$-alkyl, and optionally substituted $C_1$-$C_{12}$-alkyl

(c) $C_2$-$C_{12}$-alkenyl, and optionally substituted $C_2$-$C_{12}$-alkenyl

(d) $C_2$-$C_{12}$-alkynyl, and optionally substituted $C_2$-$C_{12}$-alkynyl

(e) aryl, and optionally substituted aryl
(f) heteroaryl, and optionally substituted heteroaryl
(g) heterocycloalkyl, and optionally substituted heterocycloalkyl
(h) $C_1$-$C_{12}$ alkyl substituted with aryl, and optionally substituted with substituted aryl
(i) $C_1$-$C_{12}$ alkyl substituted with heteroaryl, and optionally substituted with substituted heteroaryl
(j) $C_1$-$C_{12}$ alkyl substituted with heterocycloalkyl, and with optionally substituted heterocycloalkyl, and
(k) $R^7$ and $R^8$ taken together with the atom to which they are attached from a 3-10- membered heterocycloalkyl ring which may contain one or more additional heteroatoms and may be substituted with one or more substituents independently selected from the group consisting of

(aa) halogen, hydroxy, $C_1$-$C_3$-alkoxy, alkoxy-$C_1$-$C_3$- alkoxy, oxo, $C_1$-$C_3$-alkyl, aryl and optionally substituted aryl, heteroaryl and optional substituted heteroaryl
(bb) $CO_2R^3$ wherein $R^3$ is as previously defined, and
(cc) $C(O)NR^5R^6$ wherein $R^5$ and $R^6$ are as previously defined,

(ix) aryl, and optionally substituted aryl, and
(x) heteroaryl, and optionally substituted heteroaryl,
(2) $C_2$-$C_{10}$-alkyl,
(3) $C_2$-$C_{10}$-alkyl substituted with one or more substituents selected from the group consisting of
(i) halogen,
(ii) $OR^4$ wherein $R^4$ is as defined previously
(iii)-CHO,
(iv) oxo,
(v) (v) $NR^7R^8$ wherein $R^7$ and $R^8$ are defined as previously
(vi) $=N\text{-}O\text{-}R^4$ is wherein $R^3$ is as previously defined
(vii)-CN
(viii)-$S(O)_nR^3$ wherein n = 0, 1 or 2 and $R^3$ is as previously defined
(ix) aryl, and optionally substituted aryl
(x) heteroaryl, and optionally substituted heteroaryl
(xi) $C_3$-$C_8$-cycloalkyl, and optionally substituted $C_3$-$C_8$-cycloalkyl
(xii)heterocycloalkyl, and optionally substituted heterocycloalkyl
(xiii) $NR^4C(O)R^3$ where $R^3$ and $R^4$ are as previously defined
(xiv) $NR^4C(O)NR^5R^6$ wherein $R^4$, $R^5$ and $R^6$ are as previously defined
(xv) $=N\text{-}NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined
(xvi)$=N\text{-}R^4$ wherein $R^4$ is as previously defined
(xvii)$=N\text{-}NR^4C(O)R^3$ wherein $R^3$ and $R^4$ are as previously defined, and

(xviii)=N-$NR^4C(O)NR^5R^6$ wherein $R^4$, $R^5$ and $R^6$ are as previously defined,

(4) $C_2$-$C_{10}$-alkenyl,

(5) $C_2$-$C_{10}$-alkenyl substituted with one or more substituents selected from the group consisting of

(i) halogen,

(ii) $OR^4$ wherein $R^4$ is as previously defined

(iii) $O\text{-}S(O)_nR^3$ where n and $R^3$ are as previously defined

(iv)-CHO,

(v) oxo,

(vi)-$CO_2R^3$ where $R^3$ is as previously defined

(vii)-$C(O)\text{-}R^4$ where $R^4$ is as previously defined

(viii) -CN

(ix) aryl, and optionally substituted aryl

(x) heteroaryl, and optionally substituted heteroaryl

(xi) $C_3$-$C_7$-cycloalkyl

(xii) $C_1$-$C_{12}$-alkyl substituted with heteroaryl

(xiii)$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(xiv) $NR^4C(O)R^3$ where $R^3$ and $R^4$ are as previously defined

(xv) $NR^4C(O)NR^5R^6$ where $R^4$, $R^5$ and $R^6$ are as previously defined

(xvi) =N-O-$R^4$ where $R^4$ is as previously defined

(xvii)=N-$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(xviii) =N-$NR^4$ wherein $R^4$ is as previously defined

(xix)=N-$NR^4C(O)R^3$ wherein $R^3$ and $R^4$ are as previously defined, and

(xx)=N-$NR^4C(O)NR^5R^6$ wherein $R^4$, $R^5$ and $R^6$ are as previously defined,

(6) $C_2$-$C_{10}$-alkynyl

(7) $C_2$-$C_{10}$-alkynyl substituted with one or more substituents selected from the group consisting of

(i) trialkylsilyl

(ii) halogen,

(iii) -CN

(iv) $OR^4$ where $R^4$ is defined as previously

(v)-CHO,

(vi) oxo,

(vii)-$CO_2R^3$ where $R^3$ is as previously defined

(viii)-$C(O)NR^5R^6$ wherein $R^5$ and $R^6$ are as previously defined

(ix)$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(x) O-S(O)$_n$R$^3$ where n and R$^3$ are as previously defined
(xi) $C_3$-$C_7$-cycloalkyl
(xii) $C_1$-$C_{12}$-alkyl substituted with heteroaryl
(xiii)aryl, and optionally substituted aryl
(xiv) heteroaryl, and optionally substituted heteroaryl
(xv) NR$^4$C(O)R$^3$ where R$^3$ and R$^4$ are as previously defined
(xvi) NR$^4$C(O)NR$^5$R$^6$ where R$^4$, R$^5$ and R$^6$ are as previously defined
(xvii) =N-O-R$^4$ where R$^4$ is as previously defined
(xviii)=N-NR$^7$R$^8$ wherein R$^7$ and R$^8$ are as previously defined
(xix)=N-NR$^4$C(O)R$^3$ wherein R$^3$ and R$^4$ are as previously defined, and
(xx)=N-NR$^4$C(O)NR$^5$R$^6$ wherein R$^4$, R$^5$ and R$^6$ are as previously defined,
(8) cyclic substituents selected from the group consisting of
(i) aryl, and optionally substituted aryl
(ii) heteroaryl, and optionally substituted heteroaryl
(iii) heterocycloalkyl, and optionally substituted heterocycloalkyl, and
(iv) $C_3$-$C_7$-cycloalkyl, and optionally substituted $C_3$-$C_7$-cycloalkyl, and
(9) $C_1$ substituents with the exception of 10-methyl derivatives which are part of the above definitions under (1)
(i) -CHO
(ii) -CN
(iii)CO$_2$R$^3$ wherein R$^3$ is as previously defined
(iv) C(O)NR$^5$R$^6$ wherein R$^5$ and R$^6$ are as previously defined
(v) C(S)NR$^5$R$^6$ wherein R$^5$ and R$^6$ are as previously defined
(vi) C(NR$^4$)NR$^5$R$^6$ wherein R$^4$, N$^5$ and R$^6$ are as previously defined
(vii) (vii) CH=N-O-R$^4$ wherein R$^4$ is as previously defined
(viii) CH=N-R$^4$ is wherein R$^4$ is as previously defined
(ix) CH=N-NR$^7$R$^8$ wherein R$^7$ and R$^8$ are as previously defined
(x) CH=N-NR$^4$C(O)R$^3$ wherein R$^3$ and R$^4$ are as previously defined, and
(xi) CH=N-NR$^4$C(O)NR$^5$R$^6$ wherein R$^4$, R$^5$ and R$^6$ are as previously defined;
R$^1$ is selected from the group consisting of
(1) H
(2) methyl
(3) methyl substituted with one or more substituents selected from the group consisting of
(i) F
(ii) -CN
(iii)-CO$_2$R$^{11}$ where R$^{11}$ is $C_1$-$C_3$-alkyl or aryl substituted $C_1$-$C_3$-alkyl, or heteroalkyl substituted

$C_1$-$C_3$-alkyl

(iv) -$C(O)NR^5R^6$ wherein $R^5$ and $R^6$ are defined as previously

(v) aryl, and optionally substituted aryl, and

(vi) heteroaryl, and optionally substituted heteroaryl

(4) $C_2$-$C_{10}$-alkyl

(5) substituted $C_2$-$C_{10}$-alkyl with one or more substituents selected from the group consisting of

(i) halogen,

(ii) $OR^4$ where $R^4$ is defined as previously

(iii) $C_1$-$C_3$-alkoxy-$C_1$-$C_3$-alkoxy

(iv)-CHO

(v) oxo

(vi)$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(vii) =N-O-$R^4$ where $R^4$ is as previously defined

(viii) –CN

(ix) -$S(O)_nR^3$ where n = 0, 1, or 2 and $R^3$ is as previously defined

(x)aryl, and optionally substituted aryl

(xi) heteroaryl, and optionally substituted heteroaryl

(xii) $C_3$-$C_8$-cycloalkyl, and optionally substituted $C_3$-$C_8$-cycloalkyl

(xiii) $C_1$-$C_{12}$-alkyl substituted with heteroaryl, and optionally substituted heteroaryl

(xiv) heterocycloalkyl

(xv) $NHC(O)R^3$ where $R^3$ is as previously defined

(xvi) $NHC(O)NR^5R^6$ where $R^5$ and $R^6$ are as previously defined

(xvii)=N-$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(xviii) =N-$R^4$ wherein $R^4$ as previously defined, and

(xix)=N-$NHC(O)R^3$ wherein $R^3$ is as previously defined,

(4) $C_1$-$C_{10}$-alkenyl substituted with one or more substituents selected from the group consisting of

(i) halogen,

(ii) $OR^4$ where $R^4$ is as previously defined

(iii)-CHO

(iv) oxo

(v) -$S(O)_nR^3$ where n and $R^3$ are as previously defined

(vi) -CN

(vii) -$CO_2R^3$ where $R^3$ is as previously defined

(viii)$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(ix) =N-O-$R^4$ where $R^4$ is as previously defined

(x) -C(O)-$R^4$ where $R^4$ is as previously defined

(xi) -C(O)$NR^5R^6$ wherein $R^5$ and $R^6$ are as previously defined

(xii)aryl, and optionally substituted aryl

(xiii) heteroaryl, and optionally substituted heteroaryl

(xiv) $C_3$-$C_7$-cycloalkyl

(xv) $C_1$-$C_{12}$-alkyl substituted with heteroaryl

(xvi) NHC(O)$R^3$ where $R^3$ is as previously defined

(xvii) NHC(O)$NR^5R^6$ where $R^5$ and $R^6$ are as previously defined

(xviii)=N-$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(xix) =N-$R^4$ wherein $R^4$ is as previously defined,

(xx)=N-NHC(O)$R^3$ wherein $R^3$ is as previously defined, and

(xxi) =N-NHC(O)$NR^5R^6$ wherein $R^5$ and $R^6$ are as previously defined,

(5) $C_2$-$C_{10}$-alkynyl, and

(6) $C_2$-$C_{10}$-alkynyl substituted with one or more substituents selected from the group consisting of

(i) halogen,

(ii) $OR^4$ where $R^4$ is defined as previously

(iii)-CHO

(iv) oxo

(v) -$CO_2R^3$ where $R^3$ is as previously defined

(vi) -C(O)$NR^5R^6$ wherein $R^5$ and $R^6$ are as previously defined

(vii) -CN

(viii)$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(ix) =N-O-$R^4$ where $R^4$ is as previously defined

(x) -$S(O)_nR^3$ where n and $R^3$ are as previously defined

(xi)aryl, and optionally substituted aryl

(xii) heteroaryl, and optionally substituted heteroaryl

(xiii) $C_3$-$C_7$-cycloalkyl

(xiv) $C_1$-$C_{12}$-alkyl substituted with heteroaryl

(xv) NHC(O)$R^3$ where $R^3$ is as previously defined

(xvi) NHC(O)$NR^5R^6$ where $R^5$ and $R^6$ are as previously defined

(xvii)=N-$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined

(xviii) =N-$R^4$ wherein $R^4$ is as previously defined

(xix)=N-NHC(O)$R^3$ wherein $R^3$ is as previously defined, and

(xx) =N-NHC(O)$NR^5R^6$ wherein $R^5$ and $R^6$ are as previously defined;

$R^2$ is selected from the group consisting of

(1) hydrogen
(2) OH
(3) $OR^3$ where $R^3$ is as previously defined
(4) $OC(O)R^3$ where $R^3$ is as previously defined, and
(5) $O(CO)OR^3$ where $R^3$ is as previously defined;

and X and Y taken together are selected from the group consisting of

(1) O
(2) $NOR^4$ wherein $R^4$ is as defined previously
(3) N-O $C(R^9)(CR^{10})$-O-$R^4$ where $R^4$ is as previously defined and

(i) $R^9$ and $R^{10}$ are each independently defined as $R^4$, or
(ii)$R^9$ and $R^{10}$ are taken together with the atom to which they are attached form a $C_3$-$C_{12}$ cycloalkyl ring,

(4) $NR^4$ wherein $R^4$ is as previously defined, and
(5) N-$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined, or one of X and Y is hydrogen and the other is selected from the group consisting of

(1) -$OR^4$ wherein $R^4$ is as previously defined, and
(2) -$NR^7R^8$ wherein $R^7$ and $R^8$ are as previously defined.

$R^P$ is selected from the group consisting of

(1) hydrogen
(2) $R^3$ as previously defined
(3) $COR^3$ where $R^3$ is as previously defined;

~~subject to the proviso that when the structure is IV, Z and M are part of a five- or six- membered ring, said rings optionally being fully or partially unsaturated; for the six- membered ring, the bonding between Z and M is through a carbonyl group; for the five- membered ring, the bonding is directly between Z and M exeluding CO; Z and M are independently selected from the group consisting of carbon, oxygen or N; and when M = N a second bridge may exist between this nitrogen and the oxygen of the 12-OH group whereby either an additional annulated oxazole or oxazine ring constitutes part of the molecule; and subject to the proviso that when the structure is V, Z and M are part of a five- or six- membered ring, said rings optionally being fully saturated or fully or partially unsaturated; for the six-membered ring, the bonding between Z and M is through a carbonyl group; for the five-membered ring, the bonding is directly between Z and M excluding CO; Z and M are independently selected from the group consisting of carbon, oxygen or nitrogen; and when M = N a second bridge may exist between this nitrogen and the urethane nitrogen;~~

wherein aryl groups have 5 to 10 ring atoms, and heteroaryl groups have 5 to 10 ring atoms including C and at least one of N, O or S.

7. (Previously Presented) A pharmaceutical composition comprising an antibiotic 10-desmethyl macrolide of claim 6and a pharmaceutical excipient.

8. (Cancelled)

9. (Previously Presented) A method of treatment of a human or animal subject to combat bacterial infection thereof, which method comprises administering to said subject an antibiotic 10-desmethyl macrolide of claim 6.

10. (Cancelled)